

## New Products

# Handheld instruments for predictive maintenance



Newest additions to the Bently Nevada family of handheld instruments. (top left to right). TK81-Tunable Filter/Vibration Meter and TK83-Balance Master® 2. (Bottom left to right), TK85-Temporary Proximitor® Package, TK82-Optical Tachometer and TK84-Temporary Transducer Interface.

**T**he ability to make periodic measurements on the condition of rotating machinery is necessary for a successful Predictive Maintenance program. For this purpose Bently Nevada introduces a line of handheld instruments that are small, easy-to-use, and very affordable.

### TK81

The TK81 Handheld Vibration Meter/Tunable Filter provides the basic machinery vibration measurements of amplitude and frequency. The size and weight of the TK81 make it ideal for periodic measurements on virtually all types of rotating and reciprocating machinery.

The TK81 is equipped with a velocity transducer, but can also be connected to displacement (proximity) or acceleration transducers. Displacement measurements are displayed as peak to peak values, while seismic (velocity or acceleration) measurements may be displayed in zero to peak or RMS values.

A tunable filter provides the capability of isolating individual frequency components within a complex vibration signal.

For each component, both the amplitude and frequency are displayed. The filter center frequency can be adjusted from 100 to 100,000 cpm (1.7 Hz to 1.67 kHz). We offer a free "hands-on" demonstration program that allows a potential user to realize the benefits of the TK81 on a trial basis.

For more information, please check L6022 on the return card.

### TK82

Our TK82 Handheld Tachometer is a compact instrument designed for convenient measurement of shaft rotative speed on all types of machinery. The instrument's portability and low cost make it ideal for use in periodic monitoring applications such as Predictive Maintenance programs.

The TK82 indicates shaft rpm on a 5 digit LCD (Liquid Crystal Display). The instrument can obtain readings up to 18 inches from the rotating shaft, using noncontacting, reflective type detection.

For more information, please check L6023 on the return card.

### Field Balancing Package

For field balancing, we introduce a package that consists of the TK83, TK84 and TK85.

Our Machine Balancing Software is available for use with the HP 41 CV Calculator. Using data from the TK83, the software enables you to perform quick, accurate balance solution calculations for up to four balancing planes.

For more information, please check L6025 on the return card.

### TK83

The TK83 Handheld Balance Master 2 provides on-site balancing data for many machine types. The instrument's small size and low cost make it ideal for use on-site to balance pumps, fans, blowers, and other rotating equipment.

Shaft rotative speed, 1X vibration amplitude and 1X phase angle are displayed on an LCD readout selectable for English or metric units. Vibration input is accepted from proximity transducers, velocity pickups or accelerometers. The Keyphasor®, or once-per-turn signal, may be input from a proximity transducer, optical pickup or strobe light (externally powered). The TK84 and TK85 interface units can be used to provide the external transducer power.

For more information, please check L6025 on the return card.

### TK84

The ability to provide an optical Keyphasor for the TK83 (or other diagnostic instruments) is contained within the TK84 Temporary Transducer Interface. An optical pickup is connected to and powered by the TK84, then the buffered Keyphasor output is routed to the TK83.

The TK84 also includes the power source for a Proximitor®.

For more information, please check L6025 on the return card.

### TK85

For temporary proximity probe installations, we provide the TK85 Proximity Package.

Two 7200 5-metre Proximitors with proximity probes and extension cables are provided to allow on-site vibration analysis and balancing using noncontacting shaft measurements.

For more information, please check L6025 on the return card. ■